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EXAMINER	
LANDAU, MATTHEW C	
ART UNIT	**PAPER NUMBER**
2815	

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/723,329	Applicant(s) JENDICK, MANFRED	
	Examiner Matthew Landau	Art Unit 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *49-61* is/are pending in the application.

4a) Of the above claim(s) *61* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *49-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *17* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Newly submitted claim 61 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 49-60 (Invention I) are drawn to a laser apparatus. Claim 61 (Invention II) is drawn to a process of using the laser apparatus. The inventions are distinct, each from the other because:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another materially different process. Specifically, the laser apparatus can used in a process wherein no optimum engraving path is determined.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 61 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 49-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US Pat. 6,080,958, hereinafter Miller) in view of Woelki et al. (US Pat. 5,329,090, hereinafter Woelki).

In regards to claim 49, Figures 1 and 2A of Miller disclose a laser unit providing markings 114 on a surface of a continuous strip of metal 312 comprising: a beam generator 212 configured to generate a beam 218 of laser radiation configured to provide said markings in a metal; a beam deflector 216, that effects a controlled deflection of the laser beam; a control unit 236 having a memory that receives and stores a pattern to be engraved on said surface and a processor (column 5, lines 60-65) programmed to operate said laser unit to produce said pattern on said surface of said strip, wherein the control unit is set to control said laser unit to provide laser engraved markings at exact locations on said surface when said strip intermittently is in an immobilized condition (column 7, lines 23-35) before being fed into a processing apparatus 248 structured to mechanically shape the thus-marked strip into marked articles to be included in cans (column 3, lines 64 to column 2, line 9). The difference between Miller and the claimed invention is the beam deflector being arranged intermediate the beam generator and a beam

focuser. Figure 3 of Woelki discloses a beam focuser 26 positioned between a target 22 and a galvanometer (beam deflector) 29. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to modify the invention of Miller by using the beam focuser of Woelki. The ordinary artisan would have been motivated to modify Miller in the manner described above for the purpose of focusing the beam to a smaller point on the surface of the target.

In regards to claim 50, the intended limitation "wherein said laser unit is operable to provide about 1-5 μm deep engravings in said surface of said strip" does not structurally distinguish the laser unit of the claimed invention over the laser unit of Miller.

In regards to claim 51, Miller discloses said processor is adapted to control said beam deflector such that at least one pulse of laser radiation outputted by the beam generator forms visible pits in said surface, so as to form a number of said pits in said surface to reproduce said pattern (column 5, lines 2-12 and column 6, line 67 to column 7, line 35). A further difference between Miller and the claimed invention is the processor configured to conjointly control said beam generator and said beam deflector. Woelki discloses a processor 47 adapted to conjointly control a beam generator 15 and a beam deflector 18 (column 3, lines 1-10). In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to further modify the invention of Miller by having the processor control both the generator and the deflector. The ordinary artisan would have been motivated to modify Miller in the manner described above for the purpose of simplifying and centralizing the controls for the laser unit.

In regards to claim 52, Miller discloses each pump pulse has sufficient energy to generate one of said pits (column 5, lines 1-10). A further difference between Miller and the claimed

invention is the processor adapted to control a time period between subsequent pulses. Woelki discloses a processor 47 adapted to control a time period between subsequent pulses (column 3, lines 1-10). In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to further modify the invention of Miller by having the processor control the time period between pulses. The ordinary artisan would have been motivated to modify Miller in the manner described above for the purpose of simplifying and centralizing the controls for the laser unit.

In regards to claim 53, Miller discloses the processor is adapted to, based on said pattern in said memory, calculate positions of all of said pits on said surface before operating said laser unit to produce said pattern (column 6, line 67 to column 7, line 35).

In regards to claim 54, the intended use limitation "wherein said processor is programmed to determine an optimum engraving path in which the pits should be produced in the surface to from the pattern" does not structurally distinguish the laser unit of the claimed invention over the laser unit of Miller.

In regards to claim 55, Miller discloses said pattern comprises a number of characters (column 5, lines 20-30).

In regards to claim 56, Miller discloses said processor is programmed to control the beam deflector 216 such that said characters are provided sequentially one after another on said surface (column 7, lines 23-35).

In regards to claim 57, Miller discloses the marked articles are opening tabs to be attached to ends for cans (column 8, lines 40-55).

In regards to claim 58, Figure 1 of Miller discloses said laser unit is operable to provide the laser engraved markings on said surface of said strip such that each of said marked tabs have said markings on a tab surface between an opening in said tab and bent edge portions of the tab.

In regards to claim 59, the intended use limitation "wherein said control unit is set to control the feeding rate of the strip into the processing apparatus" distinguish the laser unit of the claimed invention over the laser unit of Miller.

In regards to claim 60, Figures 1 and 2A of Miller disclose a laser unit providing markings 114 on a surface of a continuous strip of metal 312 comprising: a beam generator 212 configured to generate a beam 218 of laser radiation configured to provide said markings in a metal; a beam deflector 216, that effects a controlled deflection of the laser beam; a control unit 236 having a memory that receives and stores a pattern to be engraved on said surface and a processor (column 5, lines 60-65) programmed to operate said laser unit to produce said pattern on said surface of said strip, wherein said processor is programmed to control said laser unit to provide a large number of visible pits in said surface to produce said pattern within a dwell time when the strip intermittently is in an immobilized condition (column 7, lines 23-35), the dwell time being less than about 60 ms (column 4, lines 49-52). The difference between Miller and the claimed invention is the beam deflector being arranged intermediate the beam generator and a beam focuser. Figure 2 of Ihara discloses a beam focuser 10 positioned between a target 7 and a beam deflector (8,9). In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to modify the invention of Miller by using the beam focuser of Ihara. The ordinary artisan would have been motivated to modify Miller in the

manner described above for the purpose of focusing the beam to a smaller point on the surface of the target.

Response to Arguments

Applicant's arguments with respect to claim 49-60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (703) 305-4396.

The examiner can normally be reached from 8:00 AM-4: 30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Matthew C. Landau

Examiner

June 17, 2003

EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800